

## **REMARKS/ARGUMENTS**

### **The Status of the Claims.**

Claims 1 and 17 to 20 are pending with entry of this amendment. Claims 2 to 16 and 21 to 26 were previously cancelled. Claims 1 and 17 are amended herein. These amendments introduce no new matter and support is replete throughout the specification. These amendments are made without prejudice and are not to be construed as abandonment of the previously claimed subject matter or agreement with any objection or rejection of record.

With respect to claim 1, support for a Z moiety attached directly through a heteroatom (O, N, or S) or through a linker comprising a heteroatom (O, N, or S) can be found throughout the specification. For example, see the figures, and the specification in paragraphs 46, **50** and 55.

With respect to claim 17, the amendment is merely removal of a structure with typographical error and does not add subject matter to the claim. Applicants note that the resolution and size of the numbered structures have been increased for reasons of visual clarity in claim 17, in response to an objection of record, and this does not change the subject matter therein.

Applicants submit that no new matter has been added to the application by way of the above amendments. Accordingly, entry of the amendments is respectfully requested.

### **35 U.S.C. §112, First Paragraph - Written Description.**

Claims 1 and 18 were rejected under 35 U.S.C. §112, first paragraph, as allegedly failing to comply with the written description requirement. Applicants continue to note written description of that both single and double bonded formulas are present in the specification. However, in order to expedite the application, the claim has been amended to require that the "Z" fluorophore be attached through a linker, as suggested by the Examiner.

Because the Action at page 2 acknowledges that "a linker linked ... via a double bond does fall within the teaching of the specification", claims 1 and 18 should now

be considered to have adequate written description. Applicants respectfully request withdrawal of the written description rejections.

**35 U.S.C. §112, First Paragraph - Enablement.**

Claims 1 and 18 were rejected under 35 U.S.C. §112, first paragraph, as allegedly failing to comply with the enablement requirement. Applicants traverse.

The rejections are based on the allegation that "utility [of the claims] derives from the fact that the beta-lactamase enzyme cleaves a C-O bond of a phenolic ether and releases the fluorophore." However, the claims and specification are not so limited.

As a preliminary matter, Applicants note that the structure VIII of claim 17 contains a typographical error. As pointed out by the Examiner, there typically would be an ether group immediately to the right of R<sub>3</sub> in the Structure VIII. Applicants note that they intended structure VIII to include such an ether group. However, Applicants have now amended out this structure, as suggested in the Action, and claim 17 should now be in condition for allowance.

Claim 1, as amended, is fully enabled. The Action may be suggesting that the proper scope of the claim should be limited to compounds having a C-O bond of a phenolic ether. However, linkers and linkages known in the art and the present specification are not so limited. The specification provides references and examples of functioning substrates wherein a variety of different leaving groups exist beyond phenolic leaving groups. The Action itself has pointed out the C-O bond of a phenolic ether and the C-O bond of a pyrrole disclosed in the original specification. Further, a diverse range of linkers were known in the art at the time of filing that can link to "Z" groups to beta-lactams to provide functioning substrates comprising a wide variety of cleavage sites and leaving groups. The original specification also provides a variety of linkers, e.g., in the paragraph 46 direct linkages and linkages through linkers containing nucleofugal O, N or S heteroatoms. These linker structures are taught as functional participants in the electron transfers described for the lactamase reaction, e.g., in paragraph 40 and provided references.

**Objection to Claim 17 Readability**

The Action objected to the readability of claim 17 Z choices as allegedly too faint. Current claim 17 is provided with structures from the original specification with improved size and resolution. Therefore, Applicants request withdrawal of the objection.

**Allowed Claim**

Applicants appreciate that claim 19 is allowed by the Office.

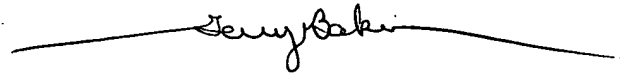
**CONCLUSION**

In view of the foregoing, Applicants believes all claims now pending in this application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the claims are deemed not to be in condition for allowance after consideration of this Response, a telephone interview with the Examiner is hereby requested. Please telephone the undersigned at (510) 769-3510 to schedule an interview.

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Respectfully submitted,



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**Attachments:**

- 1) A transmittal sheet; and,
- 2) A receipt indication postcard.